

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF102318\  
 Data File : BF110084.D  
 Acq On : 23 Oct 2018 18:19  
 Operator : JU/SJ  
 Sample : J5164-01  
 Misc : LOD 5PPM  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 LOD-MDL-SOIL-01-QT4-2018

Quant Time: Oct 24 04:32:19 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF102318.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Oct 23 15:06:18 2018  
 Response via : Initial Calibration

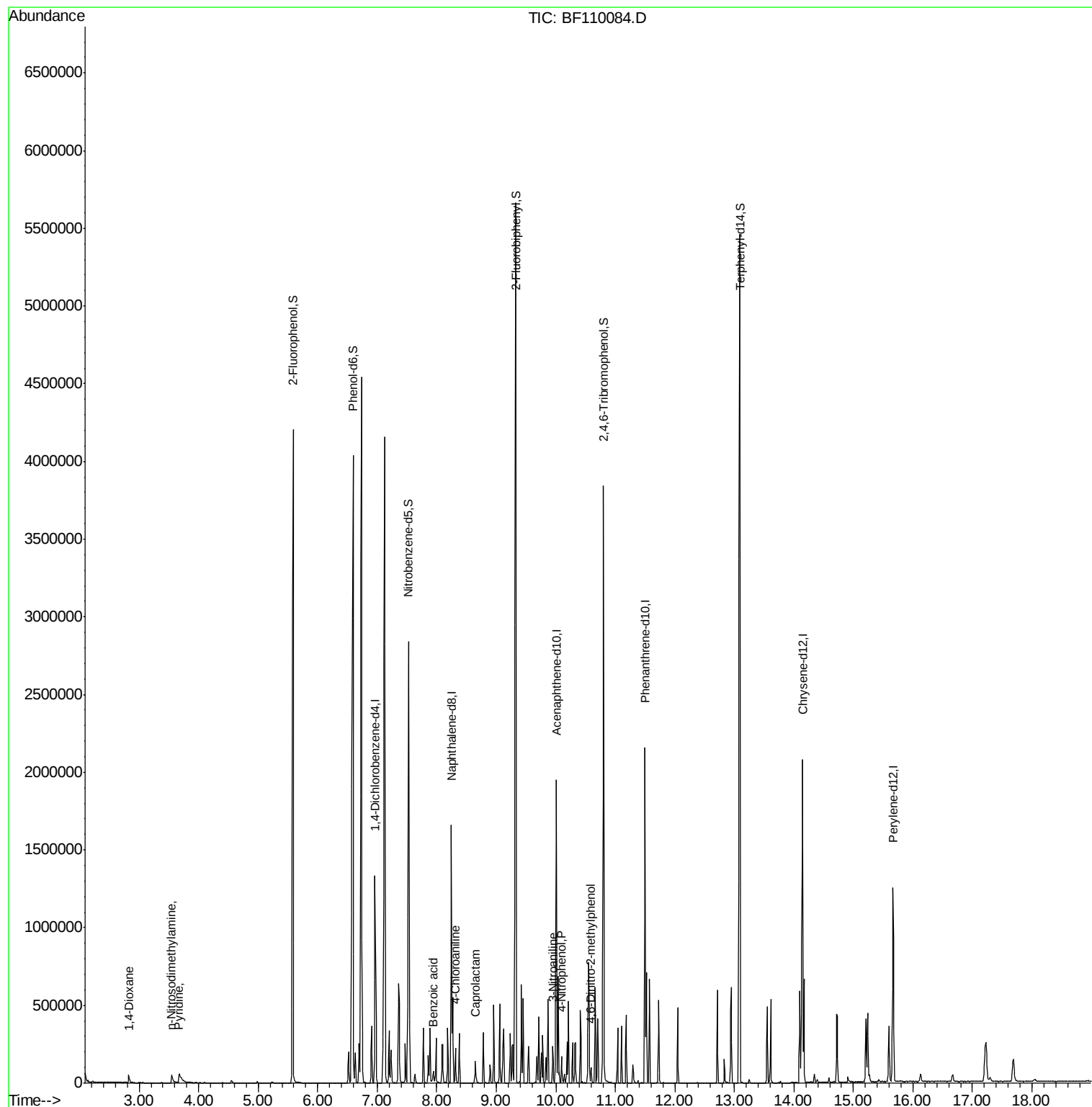
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 6.96  | 152  | 187051   | 20.00  | ng    | -0.02    |
| 21) Naphthalene-d8             | 8.25  | 136  | 785721   | 20.00  | ng    | -0.02    |
| 39) Acenaphthene-d10           | 10.01 | 164  | 387078   | 20.00  | ng    | -0.02    |
| 64) Phenanthrene-d10           | 11.50 | 188  | 745950   | 20.00  | ng    | -0.02    |
| 76) Chrysene-d12               | 14.14 | 240  | 625493   | 20.00  | ng    | -0.02    |
| 87) Perylene-d12               | 15.67 | 264  | 553067   | 20.00  | ng    | -0.02    |
| System Monitoring Compounds    |       |      |          |        |       |          |
| 5) 2-Fluorophenol              | 5.59  | 112  | 1440408  | 125.40 | ng    | -0.01    |
| 7) Phenol-d6                   | 6.59  | 99   | 1838052  | 125.11 | ng    | -0.01    |
| 23) Nitrobenzene-d5            | 7.53  | 82   | 1097842  | 82.87  | ng    | -0.02    |
| 42) 2,4,6-Tribromophenol       | 10.80 | 330  | 478517   | 124.80 | ng    | -0.01    |
| 45) 2-Fluorobiphenyl           | 9.33  | 172  | 1957230  | 79.40  | ng    | -0.01    |
| 79) Terphenyl-d14              | 13.09 | 244  | 2050890  | 68.19  | ng    | -0.01    |
| Target Compounds               |       |      |          |        |       |          |
| 2) 1,4-Dioxane                 | 2.83  | 88   | 25318    | 4.207  | ng    | 90       |
| 3) Pyridine                    | 3.67  | 79   | 63854    | 4.764  | ng    | 88       |
| 4) n-Nitrosodimethylamine      | 3.55  | 42   | 31405    | 5.592  | ng    | # 94     |
| 32) Benzoic acid               | 7.95  | 122  | 26294    | 3.153  | ng    | 95       |
| 33) 4-Chloroaniline            | 8.32  | 127  | 70228    | 4.309  | ng    | 96       |
| 35) Caprolactam                | 8.65  | 113  | 18582    | 4.891  | ng    | # 88     |
| 53) 3-Nitroaniline             | 9.95  | 138  | 31715    | 4.333  | ng    | 93       |
| 56) 4-Nitrophenol              | 10.10 | 139  | 27300    | 5.040  | ng    | 96       |
| 65) 4,6-Dinitro-2-methylphenol | 10.59 | 198  | 12065    | 3.540  | ng    | 86       |

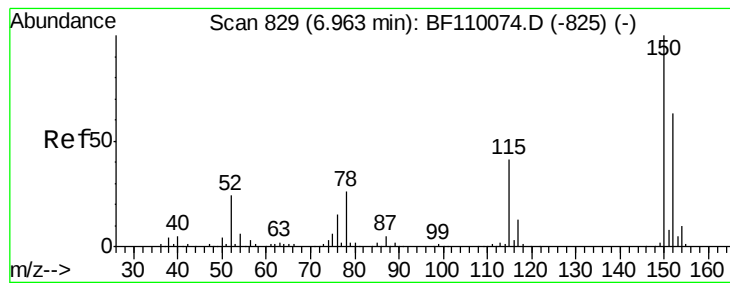
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF102318\  
Data File : BF110084.D  
Acq On : 23 Oct 2018 18:19  
Operator : JU/SJ  
Sample : J5164-01  
Misc : LOD 5PPM  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LOD-MDL-SOIL-01-QT4-2018

Quant Time: Oct 24 04:32:19 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF102318.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Oct 23 15:06:18 2018  
Response via : Initial Calibration



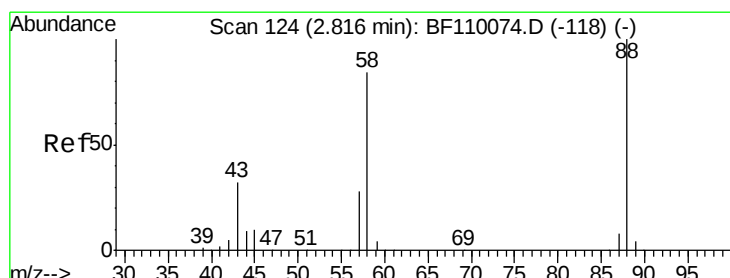
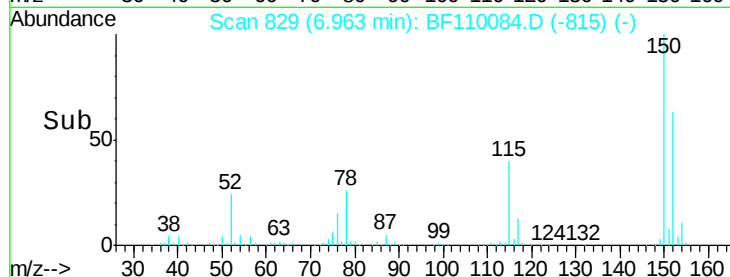
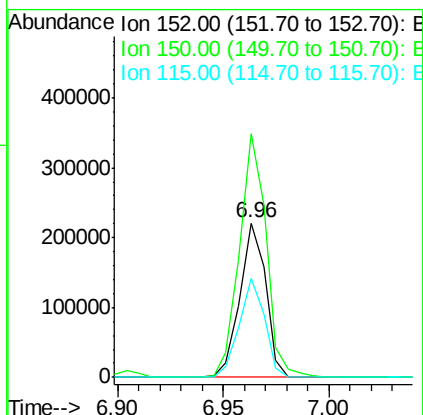
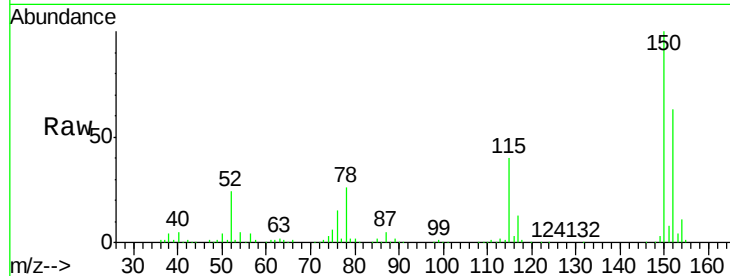


#1

1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.96 min Scan# 829  
Delta R.T. -0.02 min  
Lab File: BF110084.D  
Acq: 23 Oct 2018 18:19

Instrument :  
BNA\_F  
ClientSampleId :  
LOD-MDL-SOIL-01-QT4-2018

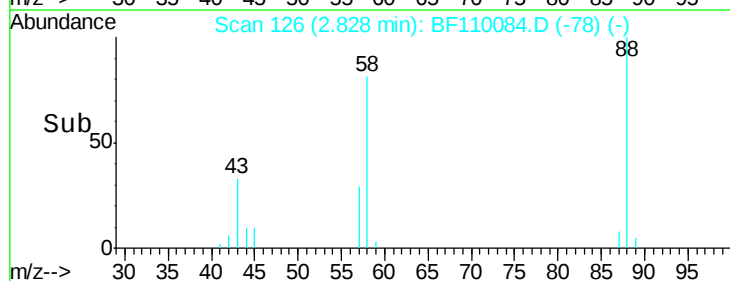
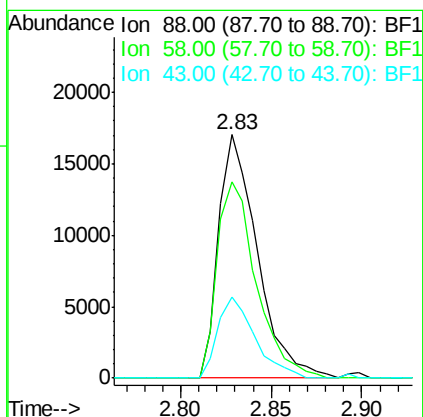
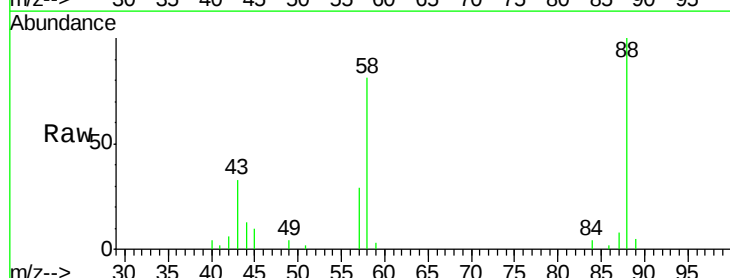
Tgt Ion: 152 Resp: 187051  
Ion Ratio Lower Upper  
152 100  
150 157.9 122.7 184.1  
115 63.9 49.1 73.7

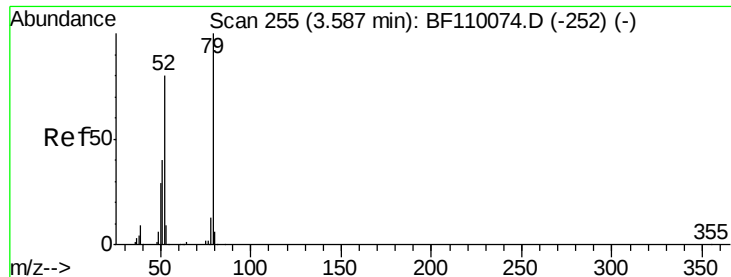


#2

1,4-Dioxane  
Concen: 4.207 ng  
RT: 2.83 min Scan# 126  
Delta R.T. -0.02 min  
Lab File: BF110084.D  
Acq: 23 Oct 2018 18:19

Tgt Ion: 88 Resp: 25318  
Ion Ratio Lower Upper  
88 100  
58 81.5 57.1 85.7  
43 32.1 24.1 36.1





#3

Pyridine

Concen: 4.764 ng

RT: 3.67 min Scan# 269

Delta R.T. 0.05 min

Lab File: BF110084.D

Acq: 23 Oct 2018 18:19

Instrument :

BNA\_F

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2018

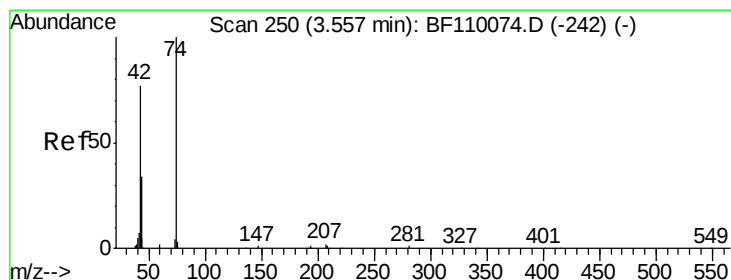
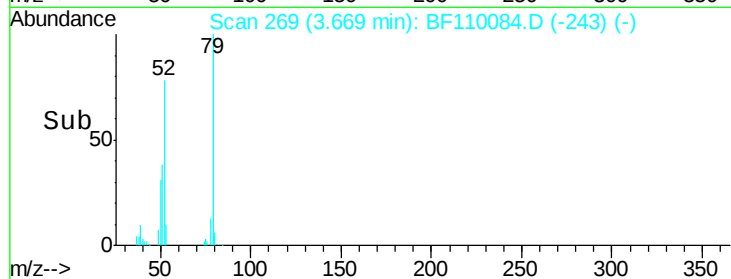
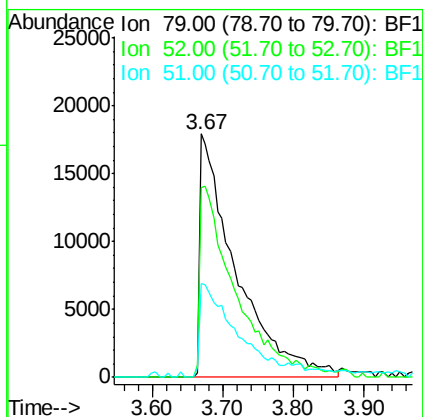
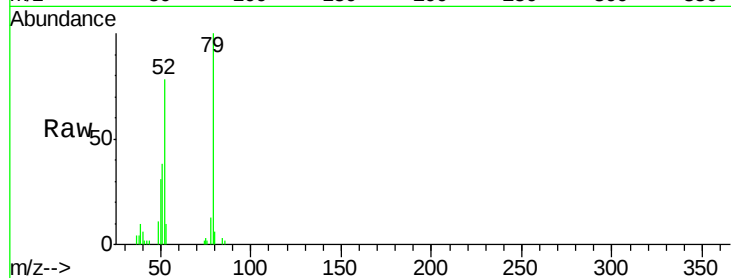
Tgt Ion: 79 Resp: 63854

Ion Ratio Lower Upper

79 100

52 77.9 53.1 79.7

51 38.5 27.4 41.2



#4

n-Nitrosodimethylamine

Concen: 5.592 ng

RT: 3.55 min Scan# 248

Delta R.T. -0.04 min

Lab File: BF110084.D

Acq: 23 Oct 2018 18:19

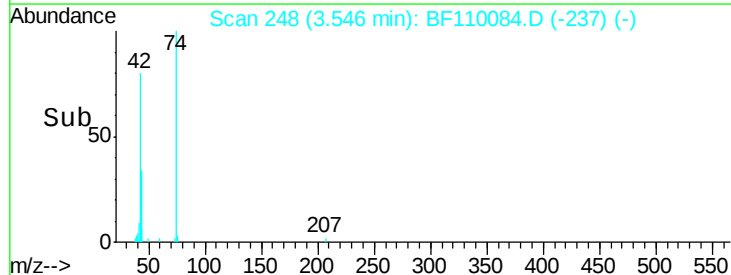
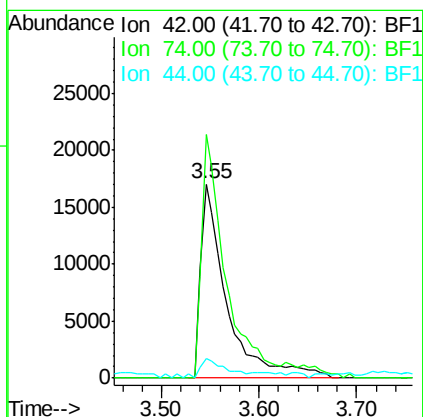
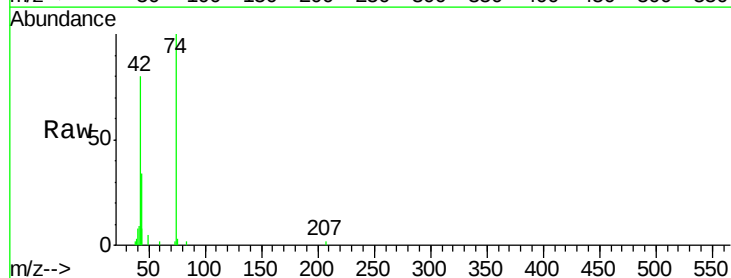
Tgt Ion: 42 Resp: 31405

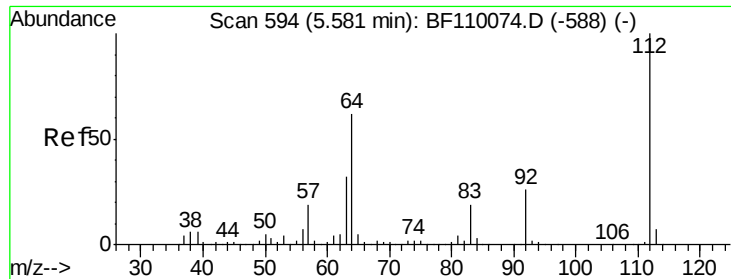
Ion Ratio Lower Upper

42 100

74 125.6 105.5 158.3

44 10.2 4.9 7.3#





#5

2-Fluorophenol

Concen: 125.401 ng

RT: 5.59 min Scan# 595

Delta R.T. -0.01 min

Lab File: BF110084.D

Acq: 23 Oct 2018 18:19

Instrument :

BNA\_F

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2018

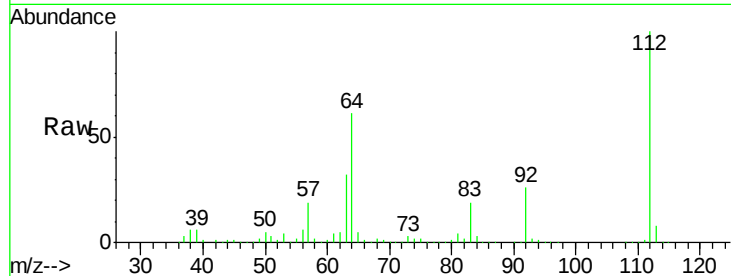
Tgt Ion: 112 Resp: 1440408

Ion Ratio Lower Upper

112 100

64 61.1 44.1 66.1

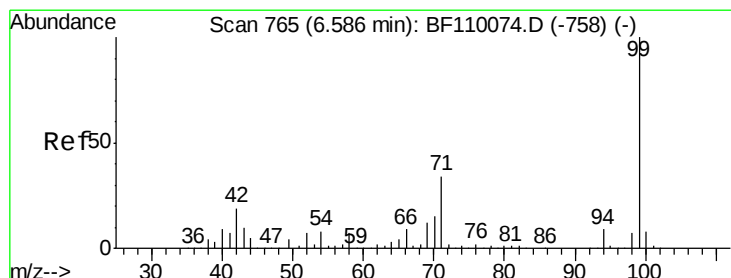
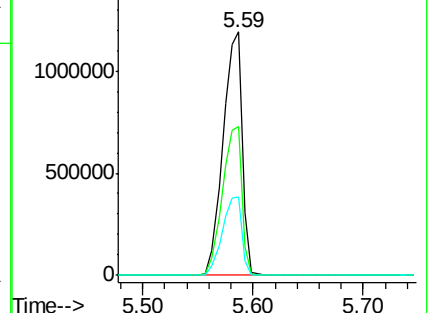
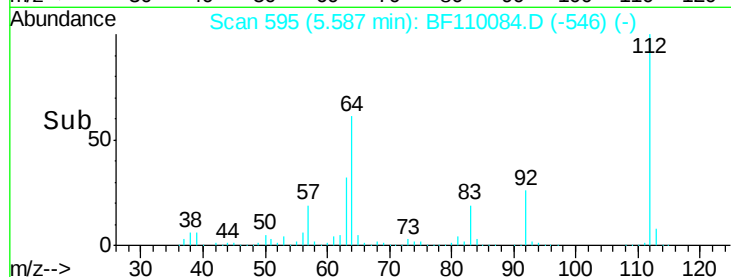
63 32.0 23.7 35.5



Abundance Ion 112.00 (111.70 to 112.70): BF1

Ion 64.00 (63.70 to 64.70): BF1

Ion 63.00 (62.70 to 63.70): BF1



#7

Phenol-d6

Concen: 125.105 ng

RT: 6.59 min Scan# 766

Delta R.T. -0.01 min

Lab File: BF110084.D

Acq: 23 Oct 2018 18:19

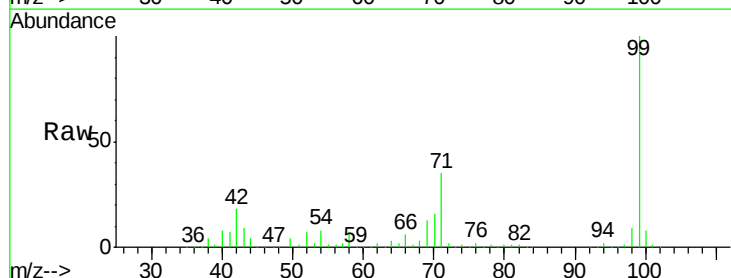
Tgt Ion: 99 Resp: 1838052

Ion Ratio Lower Upper

99 100

42 18.4 15.8 23.6

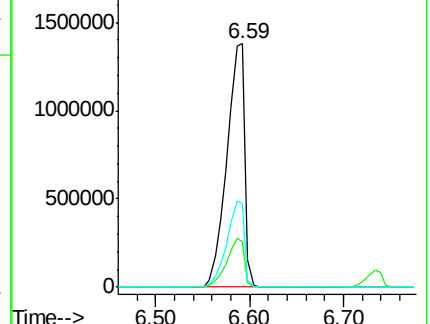
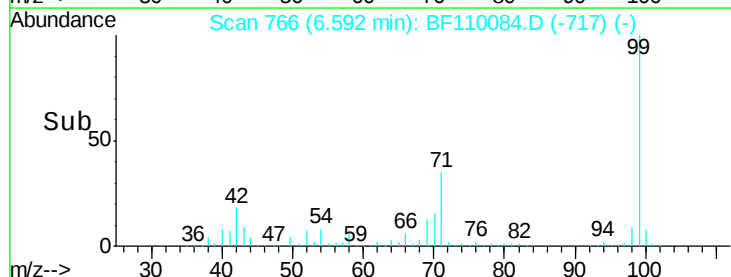
71 34.5 28.0 42.0

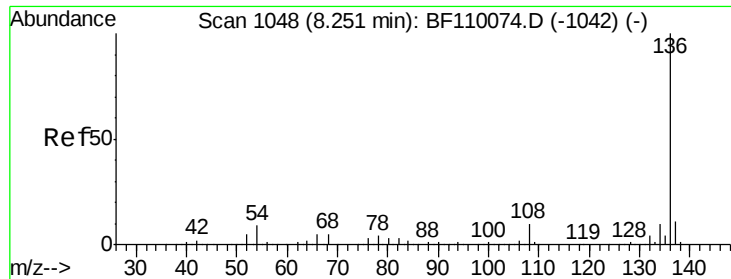


Abundance Ion 99.00 (98.70 to 99.70): BF1

Ion 42.00 (41.70 to 42.70): BF1

Ion 71.00 (70.70 to 71.70): BF1

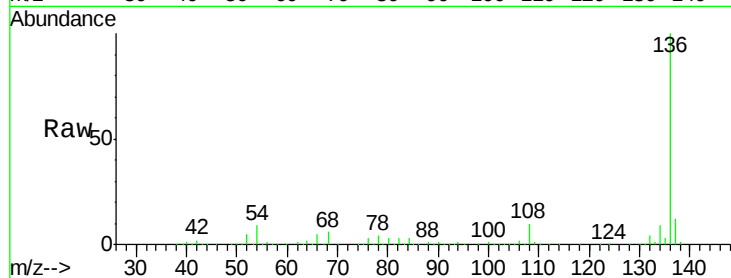




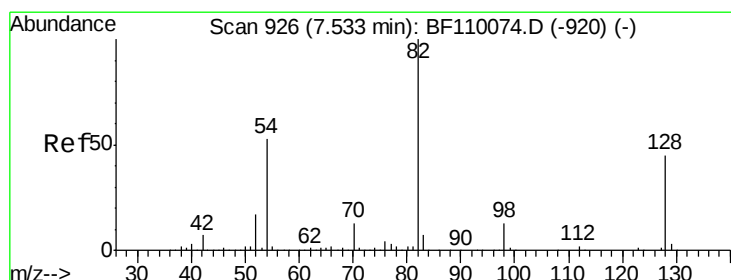
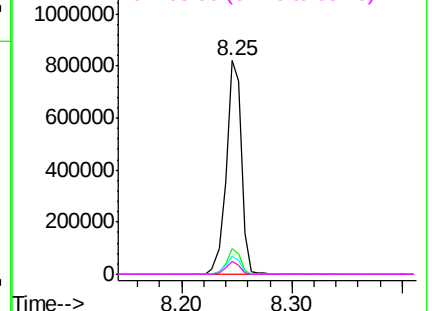
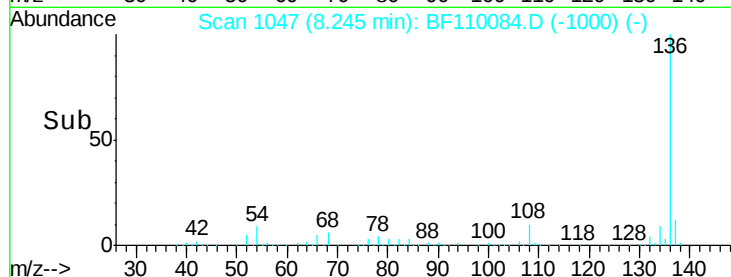
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.25 min Scan# 1047  
Delta R.T. -0.02 min  
Lab File: BF110084.D  
Acq: 23 Oct 2018 18:19

Instrument :  
BNA\_F  
ClientSampleId :  
LOD-MDL-SOIL-01-QT4-2018

Tgt Ion: 136 Resp: 785721  
Ion Ratio Lower Upper  
136 100  
137 11.7 8.8 13.2  
54 8.6 5.4 8.2#  
68 6.0 4.2 6.2

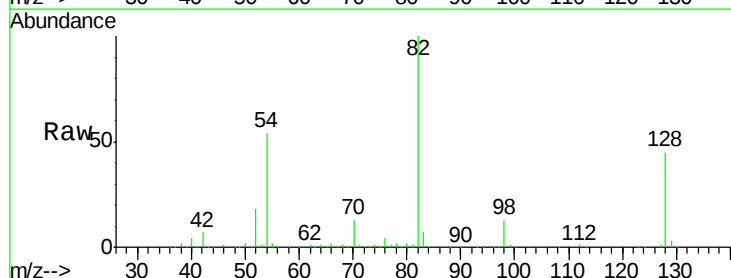


Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BF1  
Ion 68.00 (67.70 to 68.70): BF1

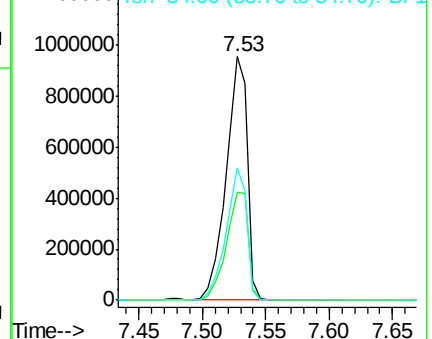
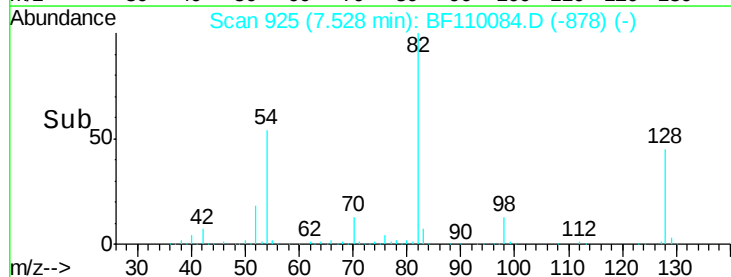


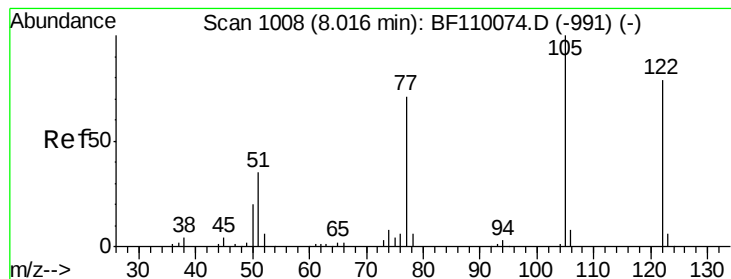
#23  
Nitrobenzene-d5  
Concen: 82.875 ng  
RT: 7.53 min Scan# 925  
Delta R.T. -0.02 min  
Lab File: BF110084.D  
Acq: 23 Oct 2018 18:19

Tgt Ion: 82 Resp: 1097842  
Ion Ratio Lower Upper  
82 100  
128 44.6 34.2 51.2  
54 54.3 38.6 58.0



Abundance Ion 82.00 (81.70 to 82.70): BF1  
Ion 128.00 (127.70 to 128.70): E  
Ion 54.00 (53.70 to 54.70): BF1





#32

Benzoic acid

Concen: 3.153 ng

RT: 7.95 min Scan# 996

Delta R.T. -0.06 min

Lab File: BF110084.D

Acq: 23 Oct 2018 18:19

Instrument :

BNA\_F

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2018

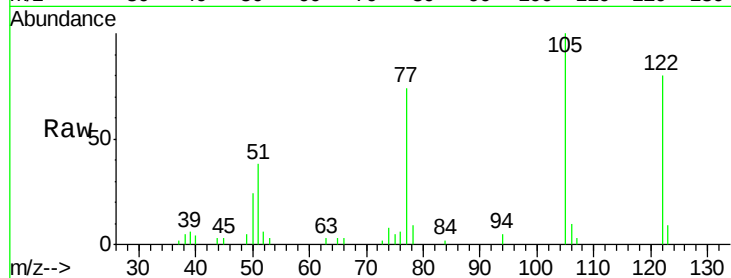
Tgt Ion:122 Resp: 26294

Ion Ratio Lower Upper

122 100

105 124.2 109.0 149.0

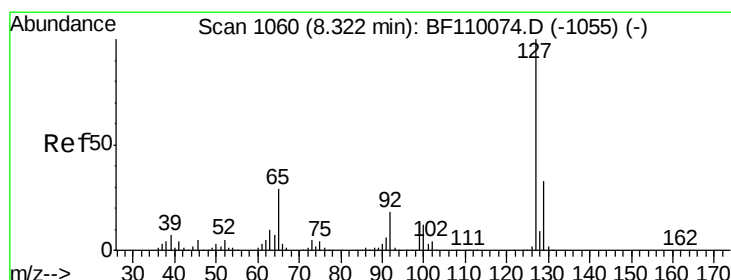
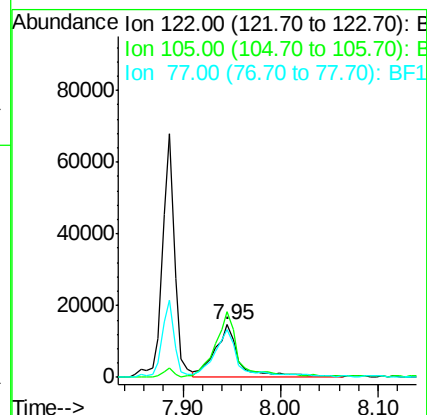
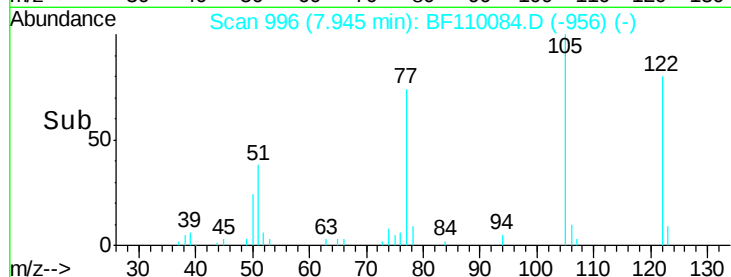
77 91.9 79.0 119.0



Abundance Ion 122.00 (121.70 to 122.70): E

Ion 105.00 (104.70 to 105.70): E

Ion 77.00 (76.70 to 77.70): BF1



#33

4-Chloroaniline

Concen: 4.309 ng

RT: 8.32 min Scan# 1059

Delta R.T. -0.02 min

Lab File: BF110084.D

Acq: 23 Oct 2018 18:19

Tgt Ion:127 Resp: 70228

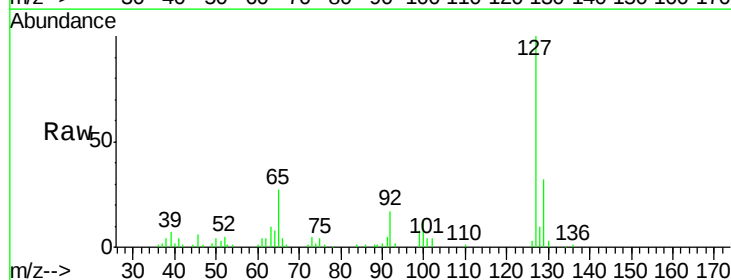
Ion Ratio Lower Upper

127 100

129 32.2 26.0 39.0

65 27.5 25.1 37.7

92 17.1 15.0 22.6

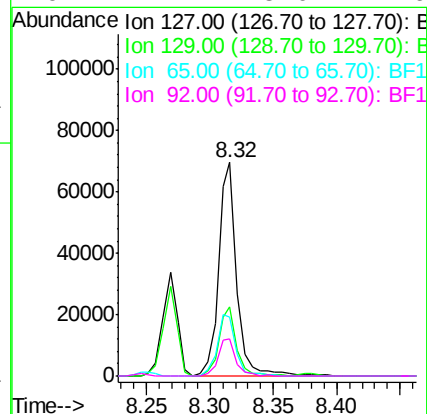
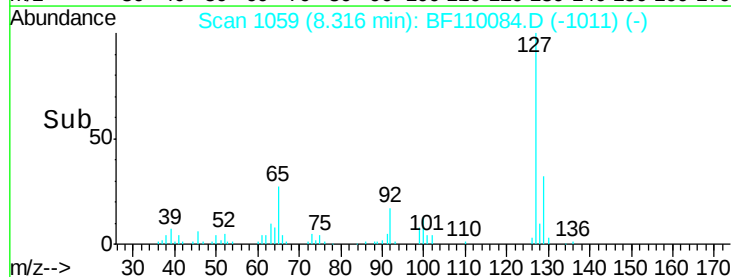


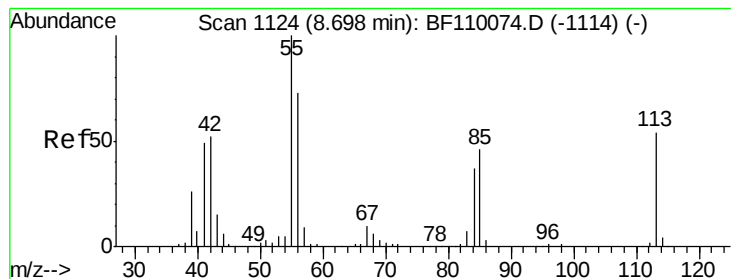
Abundance Ion 127.00 (126.70 to 127.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 65.00 (64.70 to 65.70): BF1

Ion 92.00 (91.70 to 92.70): BF1





#35

Caprolactam

Concen: 4.891 ng

RT: 8.65 min Scan# 1116

Delta R.T. -0.06 min

Lab File: BF110084.D

Acq: 23 Oct 2018 18:19

Instrument :

BNA\_F

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2018

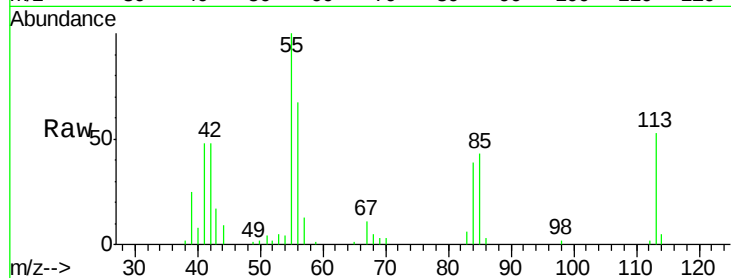
Tgt Ion:113 Resp: 18582

Ion Ratio Lower Upper

113 100

55 188.8 142.8 182.8#

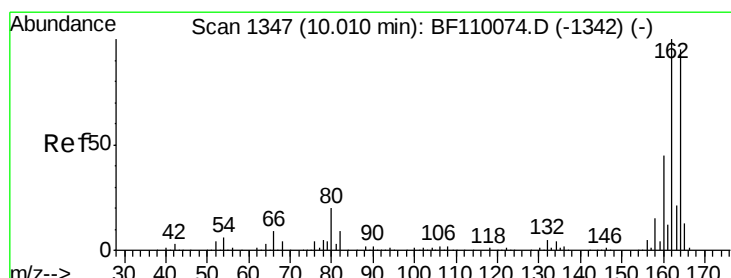
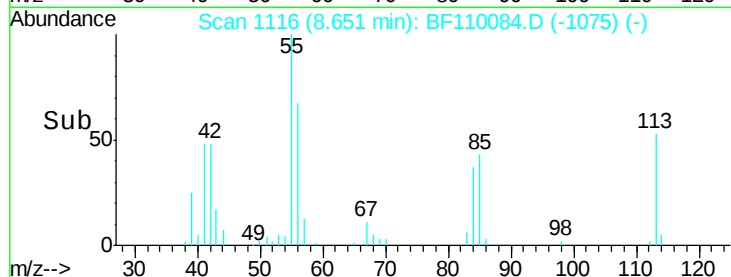
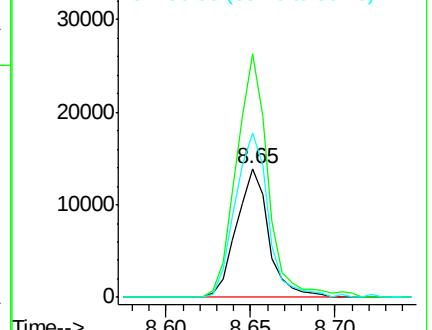
56 127.1 105.0 145.0



Abundance Ion 113.00 (112.70 to 113.70): E

Ion 55.00 (54.70 to 55.70): BF1

Ion 56.00 (55.70 to 56.70): BF1



#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 10.01 min Scan# 1347

Delta R.T. -0.02 min

Lab File: BF110084.D

Acq: 23 Oct 2018 18:19

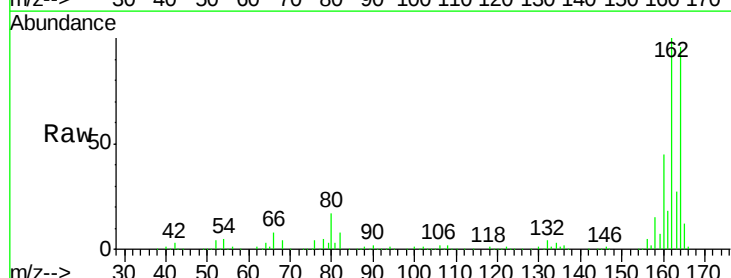
Tgt Ion:164 Resp: 387078

Ion Ratio Lower Upper

164 100

162 103.8 83.0 124.6

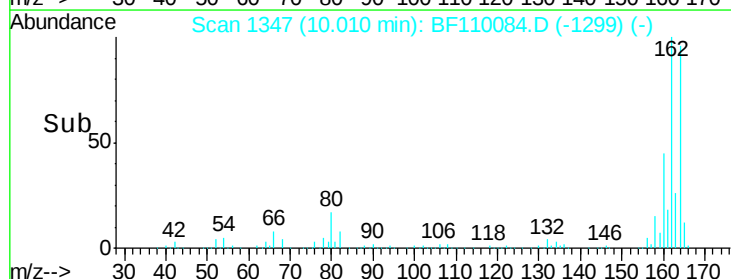
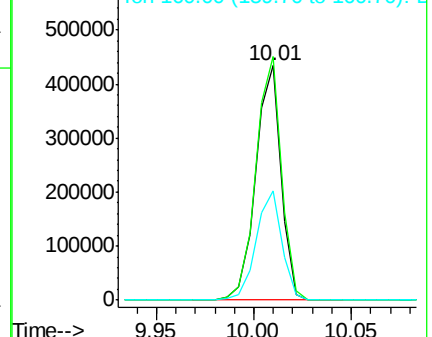
160 46.7 37.0 55.6

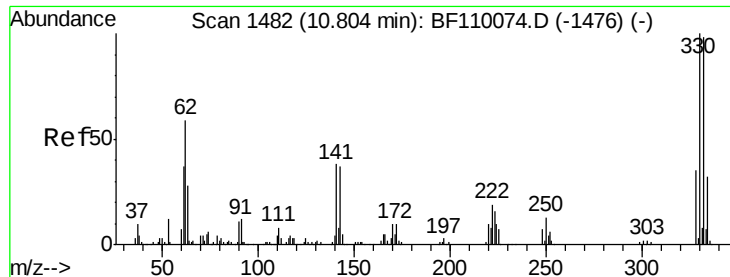


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E

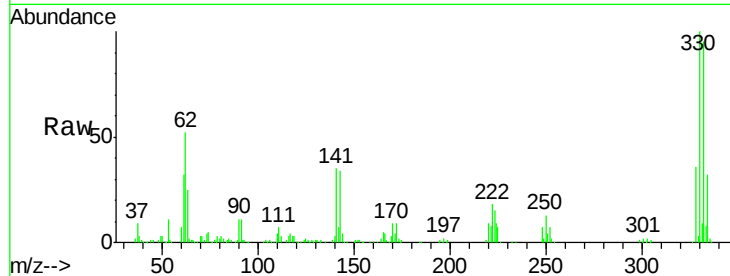




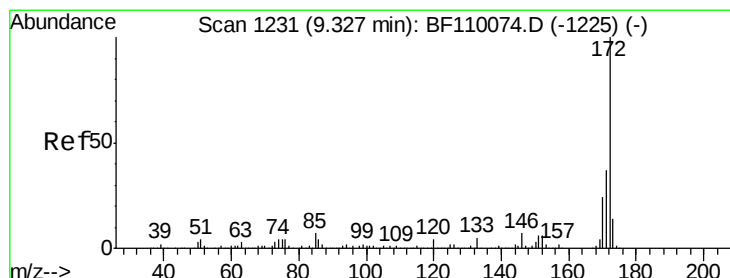
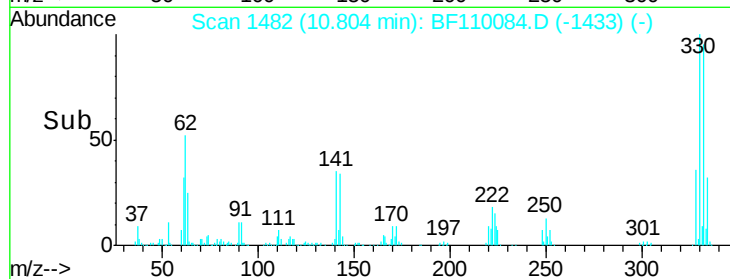
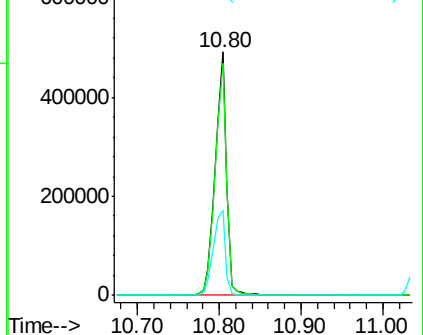
#42  
 2,4,6-Tribromophenol  
 Concen: 124.800 ng  
 RT: 10.80 min Scan# 1482  
 Delta R.T. -0.01 min  
 Lab File: BF110084.D  
 Acq: 23 Oct 2018 18:19

Instrument :  
 BNA\_F  
 ClientSampleId :  
 LOD-MDL-SOIL-01-QT4-2018

Tgt Ion:330 Resp: 478517  
 Ion Ratio Lower Upper  
 330 100  
 332 96.9 77.1 115.7  
 141 37.1 27.0 40.4

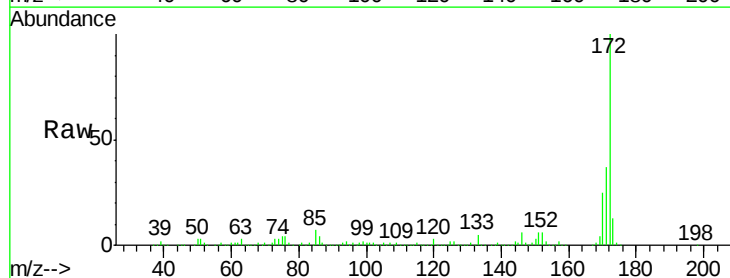


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

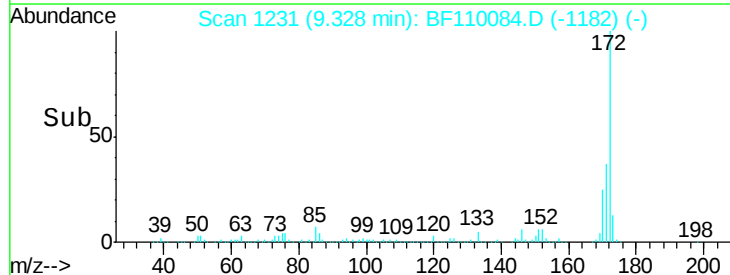
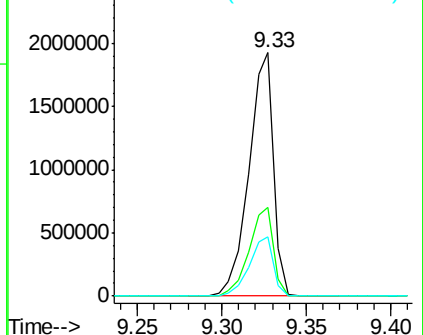


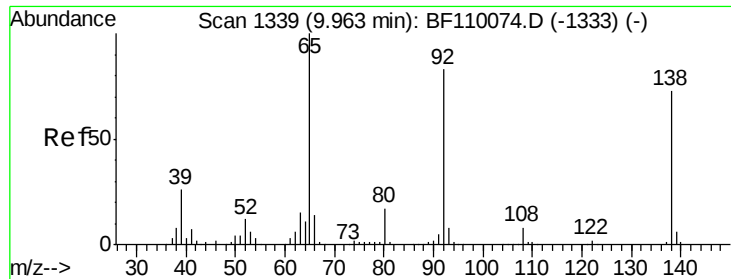
#45  
 2-Fluorobiphenyl  
 Concen: 79.399 ng  
 RT: 9.33 min Scan# 1231  
 Delta R.T. -0.01 min  
 Lab File: BF110084.D  
 Acq: 23 Oct 2018 18:19

Tgt Ion:172 Resp: 1957230  
 Ion Ratio Lower Upper  
 172 100  
 171 36.7 28.6 43.0  
 170 24.6 19.7 29.5



Abundance Ion 172.00 (171.70 to 172.70): E  
 Ion 171.00 (170.70 to 171.70): E  
 Ion 170.00 (169.70 to 170.70): E

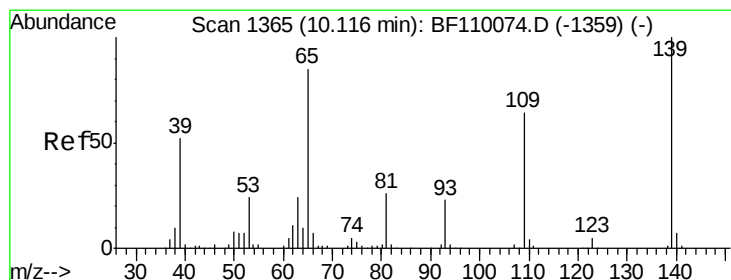
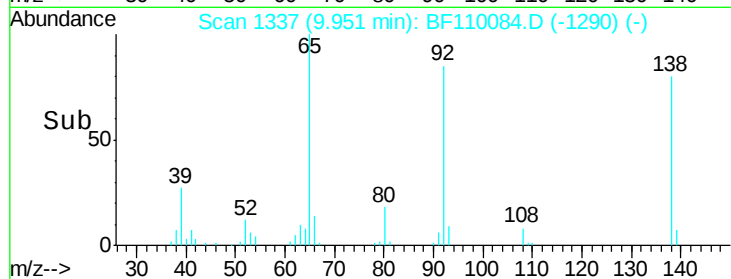
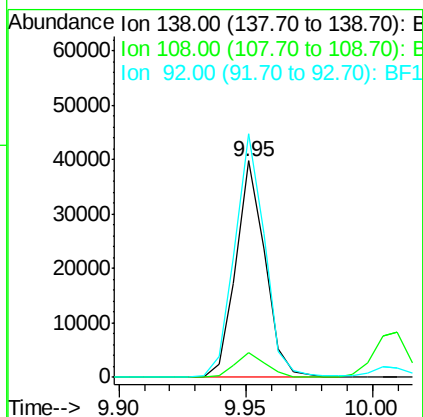
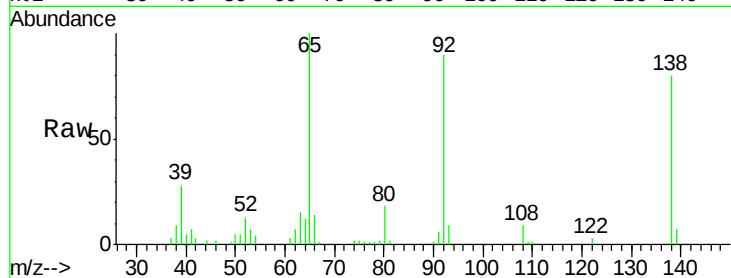




#53  
 3-Nitroaniline  
 Concen: 4.333 ng  
 RT: 9.95 min Scan# 1337  
 Delta R.T. -0.02 min  
 Lab File: BF110084.D  
 Acq: 23 Oct 2018 18:19

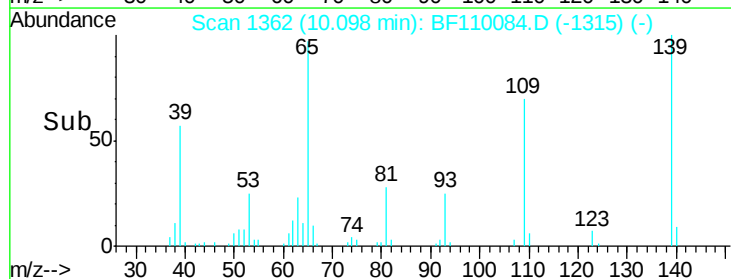
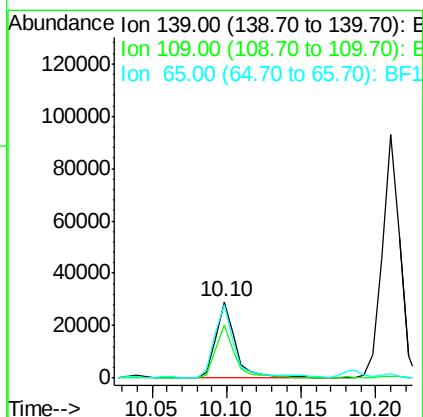
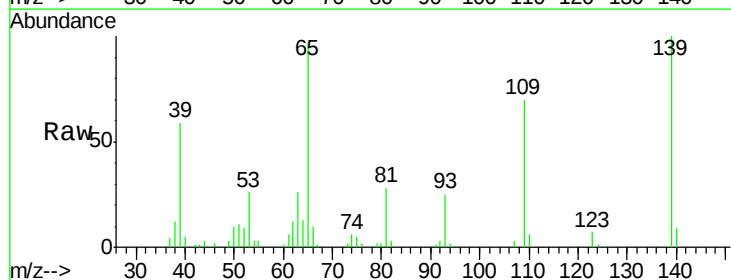
Instrument :  
 BNA\_F  
 ClientSampleId :  
 LOD-MDL-SOIL-01-QT4-2018

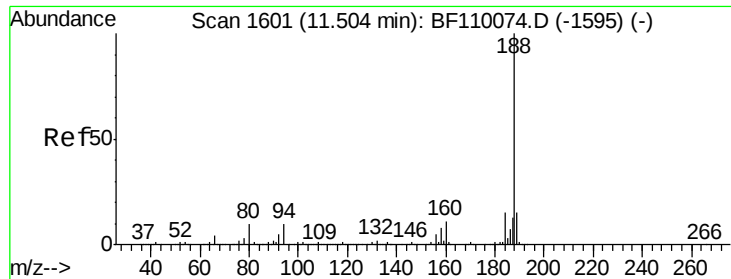
Tgt Ion:138 Resp: 31715  
 Ion Ratio Lower Upper  
 138 100  
 108 11.1 8.7 13.1  
 92 112.6 97.0 145.4



#56  
 4-Nitrophenol  
 Concen: 5.040 ng  
 RT: 10.10 min Scan# 1362  
 Delta R.T. -0.02 min  
 Lab File: BF110084.D  
 Acq: 23 Oct 2018 18:19

Tgt Ion:139 Resp: 27300  
 Ion Ratio Lower Upper  
 139 100  
 109 69.6 55.8 95.8  
 65 96.6 77.9 117.9





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.50 min Scan# 1600

Delta R.T. -0.02 min

Lab File: BF110084.D

Acq: 23 Oct 2018 18:19

Instrument :

BNA\_F

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2018

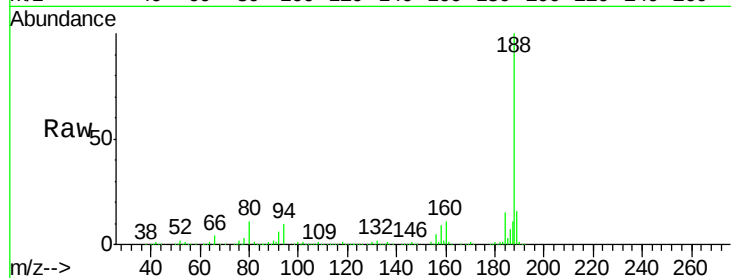
Tgt Ion:188 Resp: 745950

Ion Ratio Lower Upper

188 100

94 10.0 7.2 10.8

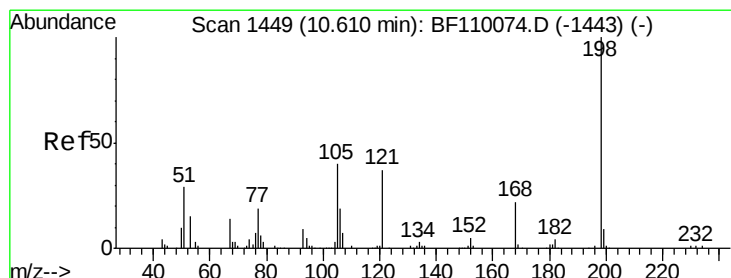
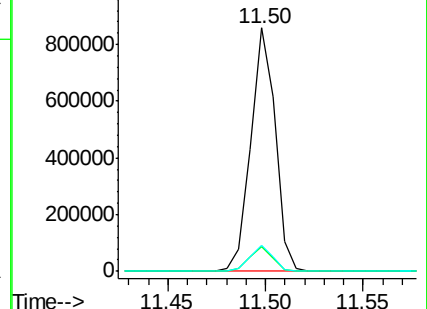
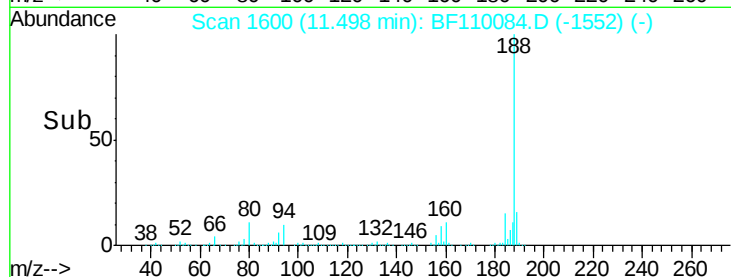
80 10.9 7.9 11.9



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF1

Ion 80.00 (79.70 to 80.70): BF1



#65

4,6-Dinitro-2-methylphenol

Concen: 3.540 ng

RT: 10.59 min Scan# 1446

Delta R.T. -0.03 min

Lab File: BF110084.D

Acq: 23 Oct 2018 18:19

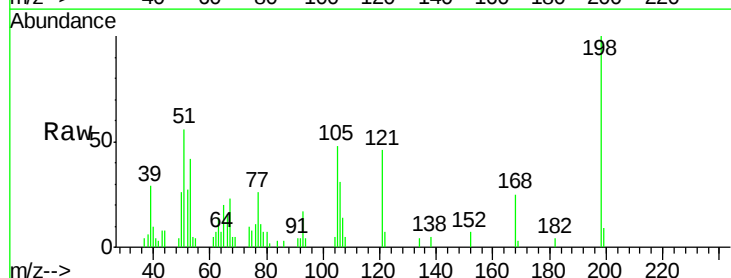
Tgt Ion:198 Resp: 12065

Ion Ratio Lower Upper

198 100

51 56.3 22.8 62.8

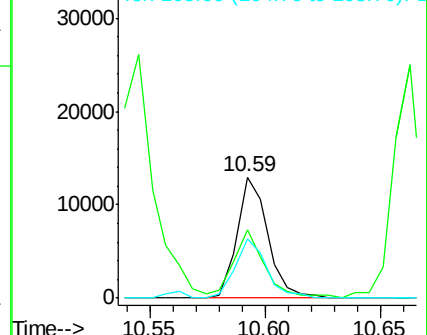
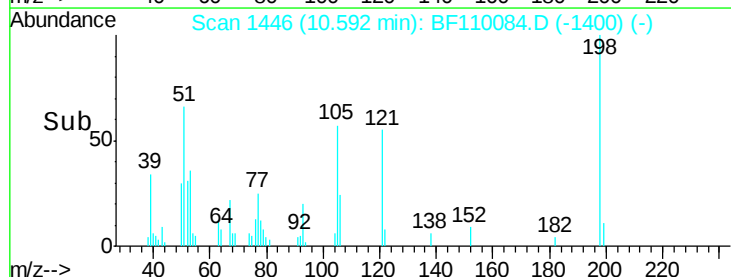
105 48.4 23.6 63.6

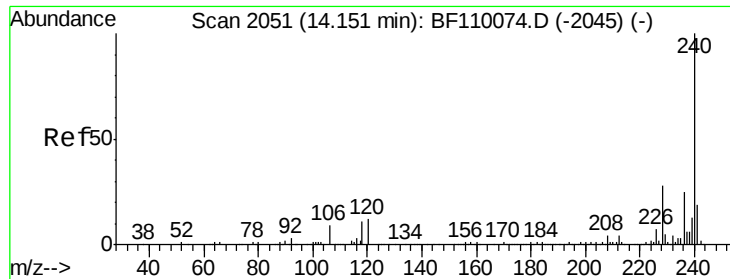


Abundance Ion 198.00 (197.70 to 198.70): E

Ion 51.00 (50.70 to 51.70): BF1

Ion 105.00 (104.70 to 105.70): E

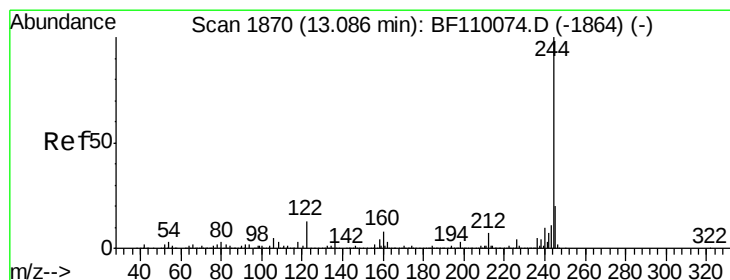
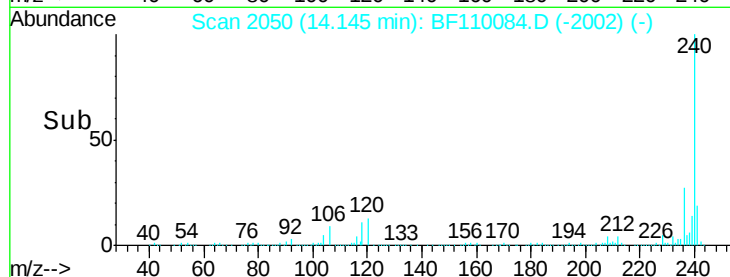
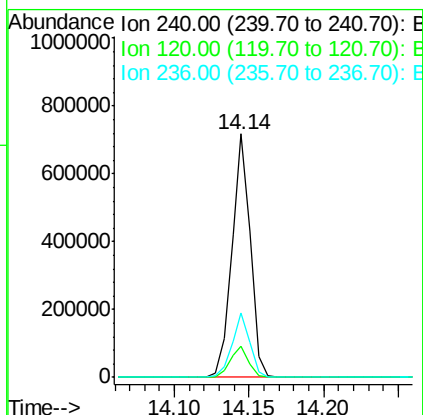
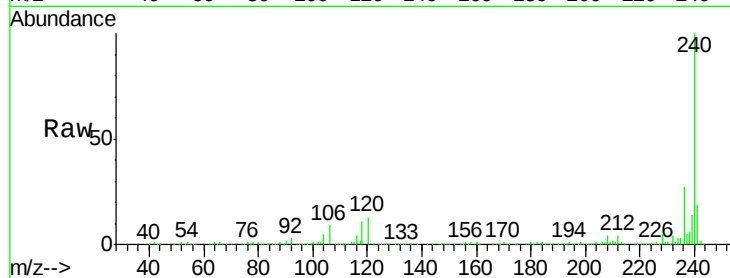




#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.14 min Scan# 2050  
Delta R.T. -0.02 min  
Lab File: BF110084.D  
Acq: 23 Oct 2018 18:19

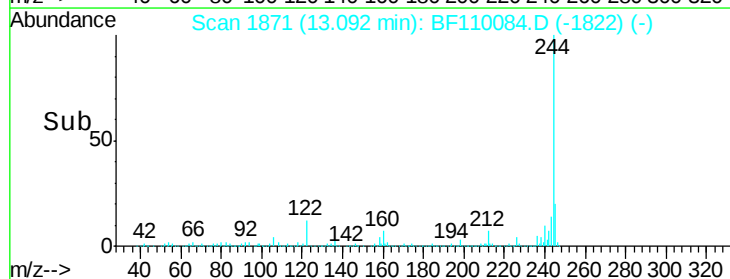
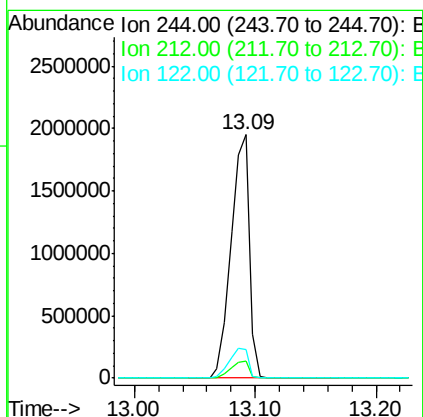
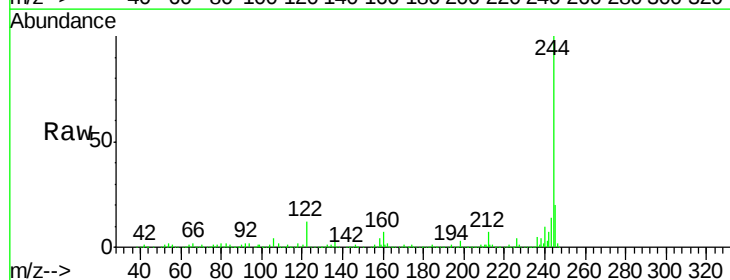
Instrument :  
BNA\_F  
ClientSampleId :  
LOD-MDL-SOIL-01-QT4-2018

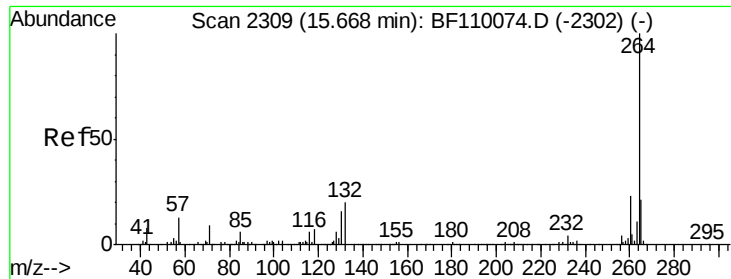
Tgt Ion:240 Resp: 625493  
Ion Ratio Lower Upper  
240 100  
120 12.9 8.3 12.5#  
236 26.5 21.2 31.8



#79  
Terphenyl-d14  
Concen: 68.190 ng  
RT: 13.09 min Scan# 1871  
Delta R.T. -0.01 min  
Lab File: BF110084.D  
Acq: 23 Oct 2018 18:19

Tgt Ion:244 Resp: 2050890  
Ion Ratio Lower Upper  
244 100  
212 7.1 5.8 8.8  
122 11.6 8.7 13.1

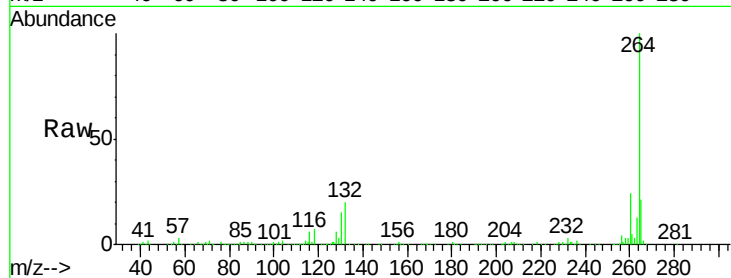




#87  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.67 min Scan# 2309  
Delta R.T. -0.02 min  
Lab File: BF110084.D  
Acq: 23 Oct 2018 18:19

Instrument :  
BNA\_F  
ClientSampleId :  
LOD-MDL-SOIL-01-QT4-2018

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.8  | 18.7  | 28.1  |
| 265     | 21.2  | 16.7  | 25.1  |



Abundance

Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E

